

Critical Thinking in Literature Review Writing Section of Students' Theses

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Abstrak: Penelitian ini dilakukan untuk menggambarkan argumen kritis mahasiswa dan struktur penulisan dalam bab kajian teori skripsi mereka. Untuk mencapai tujuan ini, peneliti menggunakan metode deskriptif. Peneliti mengambil delapan (8) skripsi terbitan dua tahun terakhir (2012-2013) di Program Studi Pendidikan Bahasa Inggris, Universitas Tanjungpura dengan mengaplikasikan teknik purposive sampling. Dalam hal ini, peneliti fokus menganalisa bab kajian teori dari skripsi mahasiswa. Hal ini dikarenakan, pada bab ini dapat menampilkan kemampuan berfikir kritis mahasiswa, khususnya dalam membuat argumen untuk menyampaikan gagasan, pengetahuan, dan pemikiran mereka. Disamping itu, peneliti dapat mendeteksi struktur penulisan didalamnya. Berdasarkan penemuan penelitian, peneliti menemukan bahwa mahasiswa sebenarnya mampu membuat argumen-argumen. Namun, mereka sering gagal dalam mempertahankan elemen-elemen argumen secara lengkap yang terdiri dari klaim, alasan, bukti, dan kesimpulan. Sebagian paragraf dibuat tanpa sebuah alasan, bukti, ataupun kesimpulan. Sebagian lainnya bahkan dibuat tanpa sebuah alasan beserta bukti atau tanpa alasan, bukti, dan kesimpulan sekaligus. Peneliti juga menemukan bahwa mahasiswa memiliki kesadaran yang baik mengenai kepaduan dalam tulisan mereka. Peneliti menyimpulkan bahwa mahasiswa sebenarnya mampu menunjukkan argumen kritis dalam bab penulisan kajian teori dalam skripsi mereka. Oleh karena itu, peneliti merekomendasikan mahasiswa yang akan menulis skripsi untuk dapat menunjukkan argumen kritis dalam tulisan ilmiah terutama penulisan skripsi.

Kata kunci: berfikir kritis, kajian teori

Abstract: This research was intended to describe the students' critical thinking arguments and the writing organization in writing literature review section of their theses. To achieve this goal, the researcher used descriptive study as method of this research. The researcher involved eight theses from last two years (2012-2013) of English Education Study Program of Tanjungpura University by applying purposive sampling technique. In this case, the researcher focused on analyzing the literature review section of their theses. It is because the section could represent the students' critical thinking skill, particularly, in making arguments to convey their ideas, insight, and thought. Besides, the researcher could detect their writing organization on it. Based on the research findings, the researcher found that

the student writers could make arguments. However, they often failed to maintain elements of argument completely that consist of claim, reason, evidence, and conclusion. Some paragraphs were constructed without a reason, an evidence, or conclusion. Some others were even constructed without reason and evidence or without reason, evidence, and conclusion. In addition, the researcher found that the student writers had good concern on cohesiveness of their writing. The researcher concluded that the student writers, in fact, were able to show their critical thinking arguments in literature review section of their theses. Therefore, the researcher recommended future student writers to show their critical thinking arguments in academic writing, particularly, thesis writing.

Keywords: critical thinking, literature review

University education emphasizes the importance of critical thinking skill because critical thinking skill is needed for the sake of academic success. As students of university, they are demanded to become persons who have numbers of skills. One of those expected skills is critical thinking as a higher order thinking skill. The students are expected to have the skill in doing their assignments, especially their theses as a fulfillment of bachelor degree. "Critical thinking is expected of students in the university assignments, by the time they graduate" (Cristine, 2006, p. 10). A qualified thesis requires students to be critical. It may be engaged in relation to the requirement of writing journal articles. This is because it will reach a wider audience who can access it easily. This means the student writers should be able to serve a good logical structure of writing journal article. Serving logical structure may help readers easily and clearly understand the research. To do this, it requires the writer to be able to communicate the ideas into well thought out both within arguments construction and writing organization.

In this regard, every student in English Study Program of Tanjungpura University is required to complete English composition thesis writing, and expected to be able to go beyond basic writing into more advanced elements of critical thinking. Literature review is considered as the core of a thesis. It is quite related to critical thinking where its main purpose is to provide the background and justification for the research undertaken. It provides the readers with theory base and a survey of reviewed material that relate to the investigation. Thus, it requires students writers reveal their understanding of theories or previous research material and to be able to manage it in order to convince readers. In other words, it takes them to have arguments in order to influence the readers by using evidence and reasoning to express a point of view and uncover a truth for them.

Based on the researcher's observation, students tended to simply give descriptions or explanations of what others published. They seemed to be difficult to make argumentative statement in literature review. "The students ignore constructing arguments comprising claims supported with reasons and evidence from the texts they read" (Alagozlu, 2007, p. 118). Students, therefore, were likely lack of knowledge what critical thinking is or how the flow of critical thinking should be in their literature review.

Students still had problem in implementing critical thinking in presenting theory and previous research material in literature review. Based on this perspective, the researcher perceived it is important to observe their theses, particularly, literature review section. This aimed at finding out the evidences the students have for critical thinking arguments in literature review sections, and the way of organizing the ideas, insight, thought linked to the issue of cohesive structure. This is useful to be better understand and expose their critical thinking in writing academic performance. Finally, this research was expected to be able to capture the evidence of students' critical thinking skill.

METHOD

This research was a kind of qualitative descriptive research design; particularly text analysis which is to examine the literature review section of students' theses. The literature review section was chosen based on the assumption that it tasks students/researchers to demonstrate their critical and evaluative sense in their writing. The object of this research, therefore, was the students' theses of English Education Study Program students of Teacher Training and Education Faculty of Tanjungpura University. The samples were taken randomly from last two years completed and provided in English Study Program. The number of samples taken were eight theses. By using this technique it enables the researcher to describe and explain what is happening within a smaller group of people. The researcher employed documentary analysis that was perceived appropriate technique because this research was a kind of text analysis. In attempt to support the technique, the researcher constructed instrument table to unpack evidence as tool of data collecting. The instrument used to examine the data was a table of criteria for critical thinking which is adapted from Stapleton (2001 cited in Alagozlu).

In this instrument, the researcher did not apply the whole criteria of the previous research. The researcher applied four criteria (argument, reason, evidence, and conclusion) of six criteria (argument, reason, evidence, recognition of opposition and refutation, conclusion, and fallacies). This decision was based on the researcher's perception that it aimed at seeing the arguments as an element of critical thinking in literature review writing only. Moreover, the core of an argument is the existence of claim, reason, evidence, and conclusion as the essential elements of an argument. This is in line with the core elements of an argument stated by Fisher (2009) including claim, reason, evidence, and conclusion. In relation to the instrument validation, the researcher had consulted the instrument to the expert.

In attempting to analyze the data, content analysis was used to examine the literature review sections gathered. It is the method to analyze qualitative data, particularly, in the content of written communications or documents. "Content analysis is a method of analyzing written, verbal or visual communication messages" (Cole 1988 cited in Satu Elo & Helvi Kynga, 2007, p.1). In order to make this research became more obvious, the researcher constructed three steps. Firstly, the researcher determined the unit of analysis which vignette was used as a single unit of analysis. Vignette, in this research, means a short piece of written text that

focuses on one moment or gives a trenchant impression about an idea or object. Secondly, the researcher categorized the data where the researchersorted the data into categories provided. It involved two categories: argument and incomplete argument. Finally, the researcher explained and analyzed the result of data analysis on the previous steps in order to gain clear description and information about the category of analysis. The analysis, finally,gave the picture of students' critical thinking skill performance particularly argument in literature review writing.

FINDING AND DISCUSSION

The whole theses analyzed has presented students' arguments. It means that the students were actually able to construct arguments in literature review writing section of their theses. The arguments were constructed within vary of patterns or argument structures. Unfortunately, major paragraphs writing could not fulfill the elements of argument completely comprising claim, reason, evidence, and conclusion. Those paragraphs were classified into incomplete argument. Nevertheless, students actually have a good concern of having well-organizing writing, cohesivness, by the use of transition words. Therefore, the researcher discussed it within two part; the argument and incomplete argument patterns, and the writing organization as follow:

a. The Argument and Incomplete Argument Patterns

The researcher found eight (8) argument and incomplete argument patterns covered in the table below:

Table1. Argument and Incomplete Argument Patterns

	ARGUMENT	INCOMPLETE ARGUMENT
PATTERNS	C+R+E+Co	C
	C+E+R+Co	C+R
	C+R+Co+E	C+E
	C=R+E+Co	C+Co
	C+R=E+Co	C+R+E
	C+R+E=Co	C+E+Co
	C+E+R+E+Co	R+Co
	C=R₁+R₂=Co₁+R₃+E+Co₂	Co

Note:

C:Claim, **R:**Reason, **E:** Evidence,**Co:** Conclusion, **R₁:** First reason, **Co₁:** First conclusion

1. Arguments

All theses analyzed were able to show the student writers' arguments. The arguments consisted of the four elements of argument as the criteria of this research applied (claim, reason, evidence, and conclusion). They were even in form of vary argument patterns. It

indicated that the student writers were able to create arguments in writing their literature review. They made the arguments in vary of argument patterns as above described. One of them is argument in form of C+R+E+Co pattern, in other words, the argument was initiated by a claim, supported by one or more reasons and evidences and then finally strengthen by the conclusion:

Vignette #1

Teaching is not only a matter of transferring knowledge to the students. It is more complicated than that **vi.1**. According to Levin and Nolan (1991:4), “Teaching is the use of preplanned behaviors and directed toward both instructional delivery and classroom management, which increase the probability of affecting a positive change in student behavior” **vi.2**. In order to provide a good teaching process, a teacher should be able to keep both knowledge delivery (product of teaching) and classroom management in balance **vi.3**. In addition, according to Cole (1998:3), “Effective teaching is defined as the actions of professionally trained person that enhance the cognitive, social and physical development of students” **vi.4**. Therefore, the products of teaching are very important and an effective teacher should produce better learning **vi.5**.

(Written by F12103015)

In this example, it could be identified that it was simple structure of argument which is begun with a claim in the first and second line of the paragraph as seen in (**V1.1**). The studentwriter tried to convince the readers with the claim of teaching is more than transferring knowledge to the students. He/she then supported it with the two following statements of teaching involves instructional delivery and classroom management that possibly makes positive change of student behavior, and knowledge delivery and classroom management should be balance to create a good teaching. They are about how the readers should believe the claim so that they are the reasons for this argument derived from direct quotation and the other is his/her logic reasoning seen in (**V1.2&V1.3**). The next statement that states effective teaching enhance the cognitive, social and physical development of students functions to justify the second reason so that the readers easily accept his/her thought of knowledge delivery and classroom management should be balance. That is the evidence of this paragraph as seen in (**V1.4**). The studentwriter then properly ended his/her argument with an explicit conclusion indicated by the word **therefore** as seen in (**V1.5**).

2. Incomplete Argument

In analyzing students' writing of literature review section of their theses, the researcher found that the students often fail to organize their ideas, insight, and thought into arguments. A great deal of tens

paragraphs of literature review writing the students made were in form of non argument. Most of them constructed their ideas, insight, and thought very well. However, they often failed to maintain their argument because their paragraphs were lack of one or more elements of argument (claim, reason, evidence, or conclusion). This was what the researcher called incomplete argument. From analyzing the incomplete argument, we could find out how the students failed to construct an argument. Those incomplete arguments were characterized by different patterns. There were eight (8) incomplete argument patterns properly described in the table above. One of them was in form of C+R+Co pattern or the argument was lack of one of the elements of argument, evidence, as follow:

Vignette #6

Game has strong contribution to in creating learning environment^{v6.1}. But, how is it happen, in learning process games provide a high intensity of interaction and feedback, have specific goal and established procedure, provide the continual feeling of challenge^{v6.2}. Games also provide a sense of direct engagement, produce the feeling of directly experiencing the environment, and directly working on the task^{v6.3}. Game make the learning so much fun that they make large amount of learning require in the play^{v6.4}.

(Written by F12103040)

Lack of one elements of argument construction is shown by the above paragraph. It is evidence that failed maintained by the student. Claim is already stated where the student believe in game contribute much to create learning environment as seen in (V6.1). This claim is well supported by two reasons where the participant succesfully gave account of how game contribute to create learning process as seen in (V6.2 & V6.3). Finally, he/she could bring the readers to his/her belief toward the final statement of game make students experiencing fun learning as seen in (V6.4). Therefore, the student actually failed to convey one elements of argument construction that is evidence in this paragraph.

b. Writing Organization

The researcher found that the participants had certain ways of developing their paragraphs to show cohesion. To show the relationship between sentences and ideas, the transition words was often used by the participants as follows:

Table 2. Transition Words/Phrases

Categories	Words/Phrases
To introduce example	Especially, for example, in this case.
To show agreement	Without a doubt.
To introduce an additional idea	In addition, then, beyond,

	furthermore, moreover, besides, further.
To indicate sequence or order, or logically divide an idea	First, second, third, last, meanwhile, then, after, thereafter, previously.
To compare	Like, similarly.
To contrast	Unlike, however, on the other hand, yet, nevertheless, although, though, despite, but, even though, alternatively.
To show cause and effect	As a result, thus, therefore, for that, in other words, consequently.
To summarize or conclude	Concisely, thus, in other words, hence, so, because of that, therefore, in conclusion, in brief.

Ideas flow more smoothly, and the logical relationships between the ideas expressed are clearer by using transitional words, for example, to introduce an additional idea can be seen as follows:

Vignette #3

According to Barker (2000: 1), communication is a process of creating shared understanding. *Then*, Alan Barker define communication in a wider scope, where communication understanding can be seen in three levels; relationship, information and action. *Moreover*, Communication usually come in oral approach or speaking. This issue also supported by Halliday(1973) in Campbell. He stated, “Speaking allows the speaker to express feeling, emotion, personality, “gut level” reaction, and information by using sound in oral communication. *In addition*, speaking function is a tool of communication, the primary media by using the sound that (...) transferring idea and information with voice and sound.

(Written by F12207007)

Although the ideas flow and the logical relationships between sentences have been emerged through the transitional words *then*, *moreover*, and *in addition* to introduce an additional idea, the participant failed to elaborate the topic. He/she only repeated the idea of *communication* instead of elaborating how communication process to create shared understanding as stated in the first sentence as the topic.

CONCLUSION

This research had presented the result of qualitative descriptive study on investigating critical thinking in literature review writing section of theses. The result showed that the students have shown their critical thinking arguments for some reasons. Firstly, some paragraphs analyzed were in form of arguments. They

were also constructed in vary of arguments patterns that means they were able to construct argument. They fulfilled the structure of an argument which is comprising claim, reason, evidence, and conclusion. Finally, some other paragraphs almost form the structure of an argument completely. They only lack of one or more elements of constructing arguments. This meant that the students were able to present elements of arguments in their writing, but they still need to be more interest and to explore more their ideas, insight, and thought within arguments. In the level of writing organization, cohesivness, they actually have a good concern of well-organizing writing. They constructed their writing into well-organized writing which is shown by the use of transition words.

The researcher finally could draw out the evidences that the sudents were able to make critical thinking arguments in the literature review section of their theses. The students were, in fact, able to show critical thinking arguments in academic writing but they just failed to maintain the ideas into an argument construction. This can be proved from the existence of incomplete arguments in literature review are major founded. The matter is that they often lost of one or any elements of argument comprising claim, reason, evidence, and conclusion. Therefore, the researcher concluded that they have shown their critical thinking skill in their academic writing both through the argument construction and writing development. It is thus recommended that further research investigates the students' critical thinking skill, particularly, on the other sections of theses. To see whether the results obtained are similar, a replication of the study is needed. The study may take different population and samples on condition that the population is still in English Education Study Program.

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